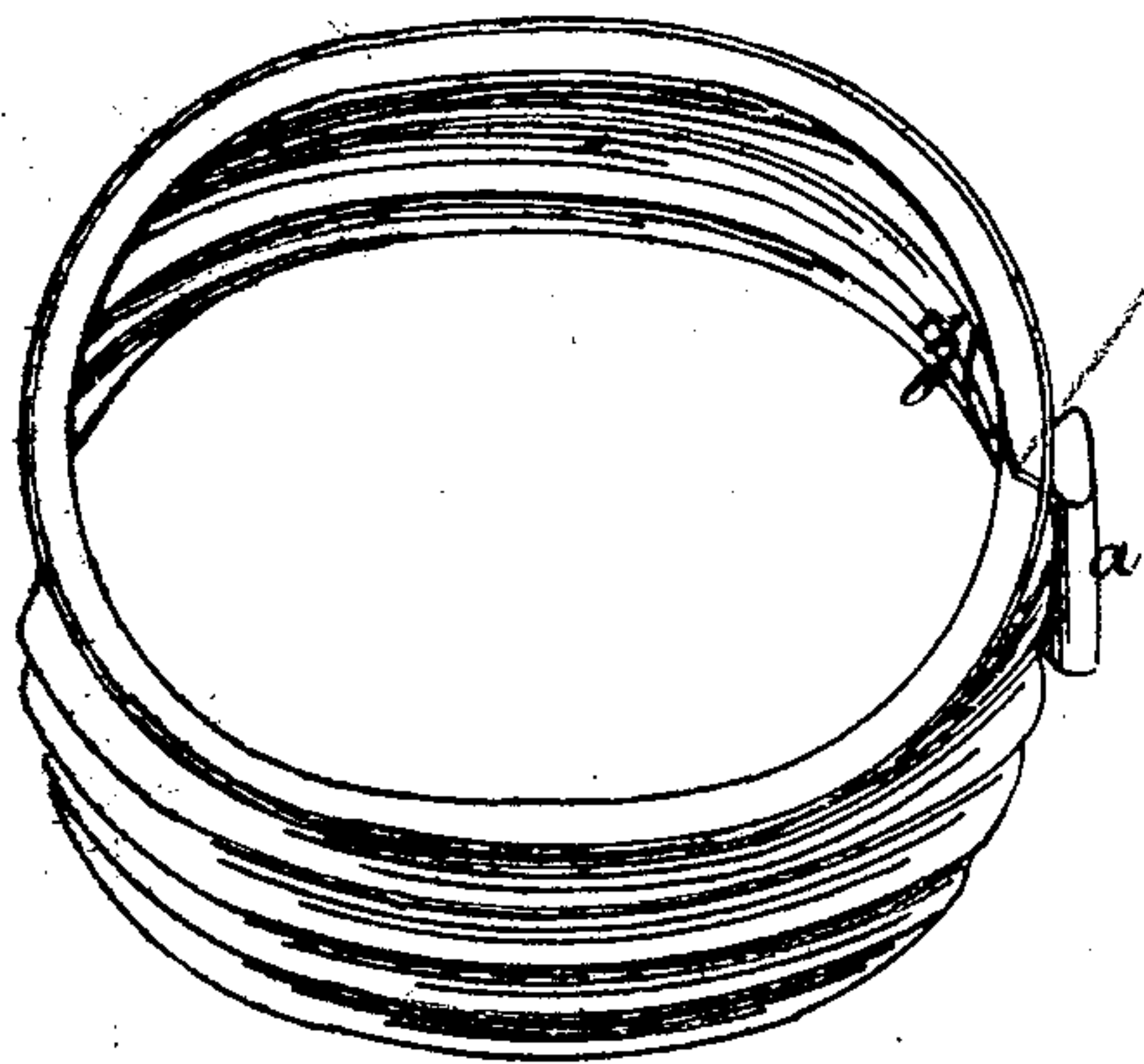


*L. R. Boyd.*

*Locking Rings for Closing Fruit-Jars.*

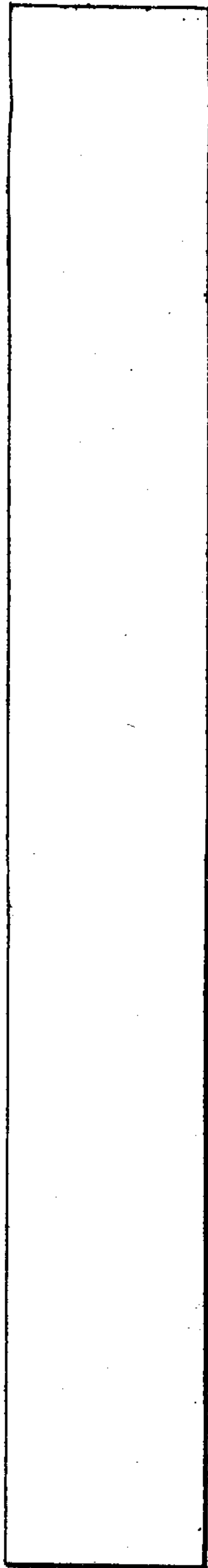
*N<sup>o</sup> 73571*

*Patented Jan. 21, 1868*



*Lapped  
& soldered*

*a*



*Fig. 2*

*Witnesses:*  
*John R. Cooper*  
*T. B. Beecher*

*Inventor.*  
*Lewis R. Boyd*

# United States Patent Office.

LEWIS R. BOYD, OF NEW YORK, N. Y.

*Letters Patent No. 73,571, dated January 21, 1868.*

## IMPROVEMENT IN THE MANUFACTURE OF LOCKING-RINGS FOR CLOSING FRUIT-JARS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEWIS R. BOYD, of the State, county, and city of New York, have invented a new and useful Improvement in Fruit-Jars; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawing which accompanies and forms a part of this specification.

This invention relates to an extremely simple, convenient, and economical method of manufacturing the sheet-metal "rings," so called, which are ordinarily employed to "lock" or securely fasten the "caps" of some kinds of fruit-jars, and by its means a material part of the cost of manufacture of the rings is saved, and a considerable reduction effected in the time required to produce a given quantity of them. Of the drawing aforesaid—

Figure 1 is a perspective view of my ring, as finished and ready for use, and having formed in it the usual screw-thread for enabling it to properly lock the cap of the jar, and

Figure 2 represents the shape and condition of the piece of sheet-metal out of which the ring is most readily and cheaply manufactured.

The mode in ordinary use for fabricating the usual sheet-metal screw-caps for fruit-jars and other purposes, is to give the requisite form to the cap, and then to produce the screw-thread in the same by means of the operation of "spinning" in a lathe; and it has also been known prior to my improvement that a screw-thread could be impressed by means of proper dies upon a strip of metal, which may afterwards be bent up into the form of a ring and soldered, and then employed, in connection with a thin circular metallic disk, of a diameter slightly greater than that of the ring, soldered over one edge of the latter, to constitute a screw-cap for a fruit-jar.

My improvement differs from both of these devices, and it consists in making a screw-cap for fruit-jars and other analogous articles by first cutting from any suitable kind of sheet metal a strip such as is shown in fig. 2, of proper length and width to constitute such a screw-ring as has been mentioned, and then, before any screw-thread has been formed in it, bending it round to make the ring, and, after preferably lapping the ends of the strip slightly, soldering them firmly together, and then placing the ring in this condition upon a suitable chuck in a spinner's lathe, and spinning the requisite screw-thread in it in the mode which is familiar to practical metal-spinners, or forming the thread by the equivalent mode of rolling it in, as may readily be done by those skilled in the art. When this has been done, a projecting knob or stud, *a*, may, if desired, be formed in any convenient manner upon the exterior of the ring at any required point, but by preference at the point of junction of the ends of the metallic strip where they are soldered, as seen at *z*, and by this means the ring, when applied to a jar, may readily be tightened or loosened in the ordinary way.

The advantages of this improved method of manufacturing these rings will be found in practice to be very great, inasmuch as they can be made in much less time and with much less trouble than by any other mode hitherto known, while the saving in metal produced by it is of such importance that rings made in this way can be profitably sold at prices considerably under those manufactured in the ordinary manner. This saving in material will be manifest when it is remembered that in the usual operation of manufacturing rings of this class by spinning, it is necessary to make the ring by forming it up over the chuck in the lathe by the spinning-tool out of a circular piece of metal large enough to make a screw-cap of the same diameter as the proposed ring, and then cutting out the bottom of the cup-shaped article thus produced, in order to make the ring, substantially in the same manner as is now practised in making what are known as screw-nozzles, used in connection with the well-known "Mason fruit-can." This of course causes a great waste of metal, as the portions cut out as described cannot ordinarily be utilized. Moreover, as the pieces used when the rings are thus made must necessarily be of a circular shape, as stated, they cannot, without a further great loss, be cut out of the square-cornered sheets in which the requisite thin metal is found in the market. But by my improvement all this waste and loss are avoided, because I only require to employ for my rings a straight strip of metal, which can always be cut from any kind of sheet, with no waste which is at all material.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The above-described improved method of manufacturing screw-rings for fruit-jars and other analogous articles, substantially as and for the purposes set forth.

LEWIS R. BOYD.

Witnesses:

JOHN R. COOPER,  
T. B. BEECHER.